BEFORE THE

Federal Communications Commission

WASHINGTON, D.C. 20554

In the Matter of	)	
	)	
Amendment of the Commission's	)	GN Docket No. 96-228
Rules to Establish Part 27,	)	
the Wireless Communications	)	
Service ("WCS")	)	

TO: The Commission

REPLY COMMENTS OF
AEROSPACE AND FLIGHT TEST RADIO COORDINATING COUNCIL

Aerospace and Flight Test Radio Coordinating Council ("AFTRCC") hereby replies to certain of the opening comments filed in the above-captioned proceeding.

INTRODUCTION

In its opening comments AFTRCC supported the Commission's proposal to preserve a transitional primary position for flight testing in the band 2320-2345 MHz; but urged that the Commission re-think the proposed Wireless Communications Service ("WCS") out-of-band attenuation limits. In particular, AFTRCC observed that the proposed limits would not protect flight testing, ground receiving stations for which are extremely sensitive.

DISCUSSION

Only a handful of the opening comments warrant a reply. In particular Consumer Electronics Manufacturers Association ("CEMA") urges the Commission not to finalize its rules for WCS until CEMA has filed its report on test results of the various DARS systems. CEMA further suggests that it may seek alternative spectrum for DARS.

It appears that CEMA would have the Commission further delay the completion of the Satellite DARS proceeding -- a proceeding that has already consumed an inordinate length of time. Moreover, there is no indication in the comments of any of the DARS applicants that the spectrum available for DARS (2320-2345 MHz with 2305-2320 and 2345-2360 MHz available on a shared basis with WCS) is inadequate. DARS has had enough problems getting off the ground without re-opening the long-settled allocations issue, least of all at the behest of a party which is not even an applicant.

One party (Primosphere Limited Partnership) calls attention to the inconsistency between the proposed protection for telemetry in footnote US 328 (a protection which would be continued for flight testing in 2320-2345 MHz by the WCS Notice) and the proposal to relegate flight testing to secondary status in

the WCS bands. The commenter also references the proposal in the DARS Notice to effect a consequential revision to Aviation Rule 87.303, a revision which would arguably confine flight testing to 2360-2390 MHz coincident with adoption of a DARS decision.[1] The commenter goes on to "oppose[] maintaining aeronautical telemetry allocations in the 2310-2360 MHz band even on a secondary basis." Id. at 7.

There is no basis for relegating flight testing to secondary status in 2320-2345, much less any basis for precluding flight test use of the band altogether. The aviation community agreed to reallocation of the band 2310-2360 MHz for DARS at the time of the 1992 WARC in return for preservation of the L-band from 1435-1525 MHz and the remainder of the S-band from 2360-2390 MHz. Integral to that agreement was the notion that flight testing could continue to use 2310-2360 MHz "until January 1, 1997 or until broadcasting-satellite (sound) service has been brought into use in such a manner as to affect or be affected by the

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[1] It should be noted that the DARS Notice is itself inconsistent on this point. DARS Notice of Proposed Rulemaking, FCC 95-229, released June 15, 1995, para. 61 (endorsing continued protection for flight testing a la' footnote US 328) with paras. 120-21 and Appendix II (suggesting "consequential" revision to Part 87).

mobile and radiolocation services in those service areas, whichever is later." US 328. This dispensation was important in order to avoid needless disruption to the flight test ranges operating in the lower S-band. Adoption of the commenter's view would eviscerate this transitional protection, and for no good reason.

The simple fact is DARS has nothing to be concerned about from flight testing: Flight test authorities will not undertake the expense of moving from 2310-2320 MHz, for example, to 2320-2345 MHz, only to have to move again (up to 2360-2390 MHz) in a year or two when BSS becomes operational. And in any event, flight testing would hardly run the risk of receiving interference from a BSS system in order to stay put in 2320-2345 MHz past the BSS operational date. Such a notion is contrary to the realities of flight testing -- a process which depends critically on interference-free, real-time telemetry for aircrew safety and productivity, but which utilizes ground receiving systems requiring protection down to a level of -177 $dBW/m^2/4$ kHz. [2] In

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[2] Airborne transmitters are often small with low output power. With aircraft operating at significant distances from the test facility and undergoing the extreme gyrations which can characterize the flight test process, telemetry signals start out low and fluctuate down to barely detectable levels; hence, the need for extremely sensitive receivers -- receivers which are also (Continued)

other words flight test agencies will continue migrating from 2310-2360 MHz for their own good reasons: There is no need to evict them from 2320-2345 MHz prematurely.[3]

Finally, there is the matter of out-of-band attenuation. Lucent Technologies, Inc. suggests that the out-of-band emission guidelines used for PCS should be applied provisionally to WCS. However, the PCS Rule (§ 24.238) suffers from the same deficiencies as the WCS proposal, indeed it is identical for mobile operations. AFTRCC urges that this issue be given further study so that flight testing in 2320-2345 and 2360-2390 MHz (ultimately the latter band only) is protected from out-of-band emissions from whatever source.

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sensitive to the presence of unwanted signals. In this respect AFTRCC agrees with the commenter that "spectrum sharing between DARS and aeronautical telemetry is not technically feasible...." Id. at 7.

[3] AFTRCC would prefer to see the protection of footnote US 328 continued for the proposed WCS bands as well, i.e. 2310-2320 and 2345-2360 MHz. Unfortunately the Omnibus Consolidated Appropriations Act, 1997, directing the Commission to reallocate and license these bands on an accelerated timetable, has effectively precluded this result.

CONCLUSION

For the reasons stated herein and in AFTRCC's opening Comments, the WCS proceeding should be resolved along the lines recommended by AFTRCC.

Respectfully submitted,

AEROSPACE AND FLIGHT TEST RADIO
COORDINATING COUNCIL

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